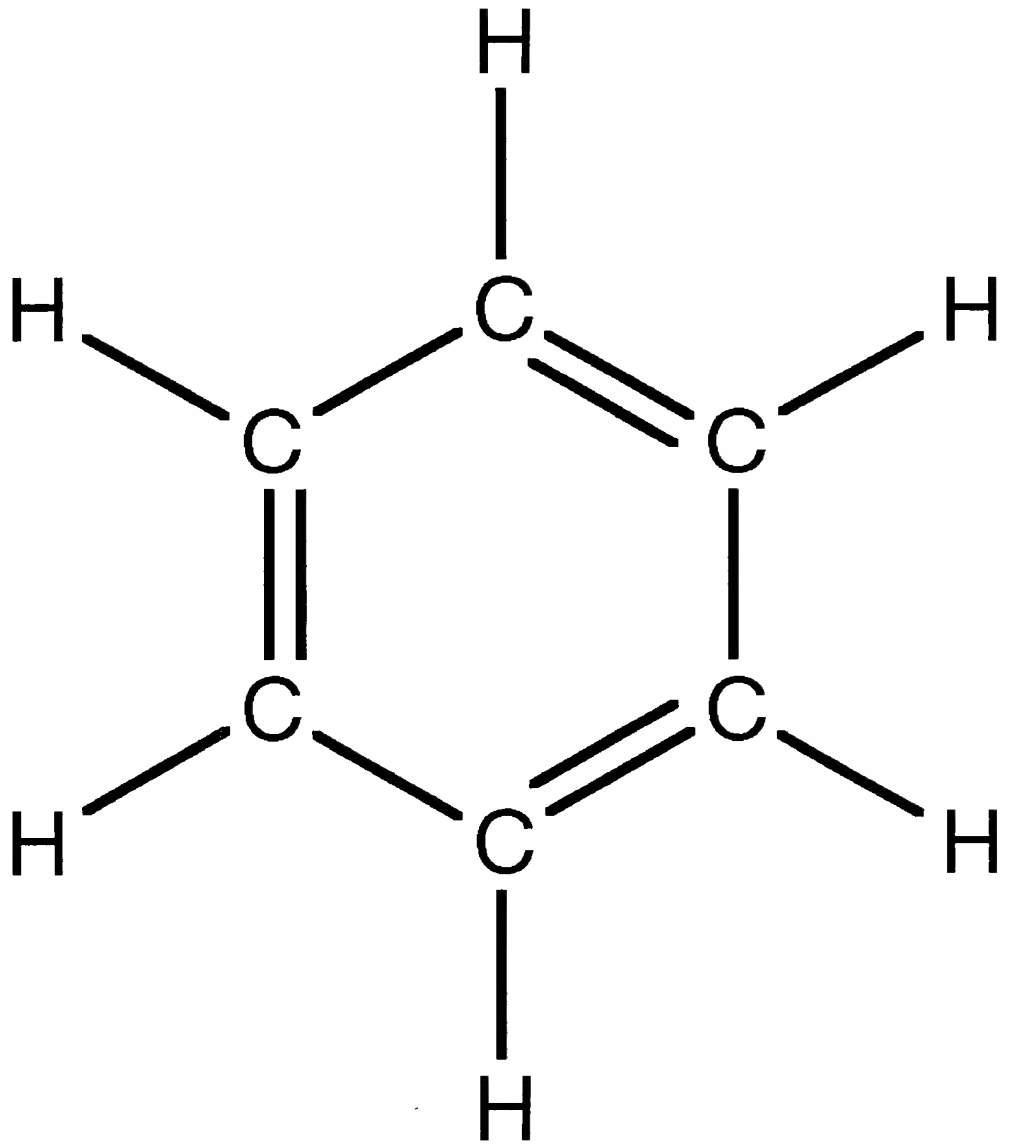


FIG. 1 (PRIOR ART)

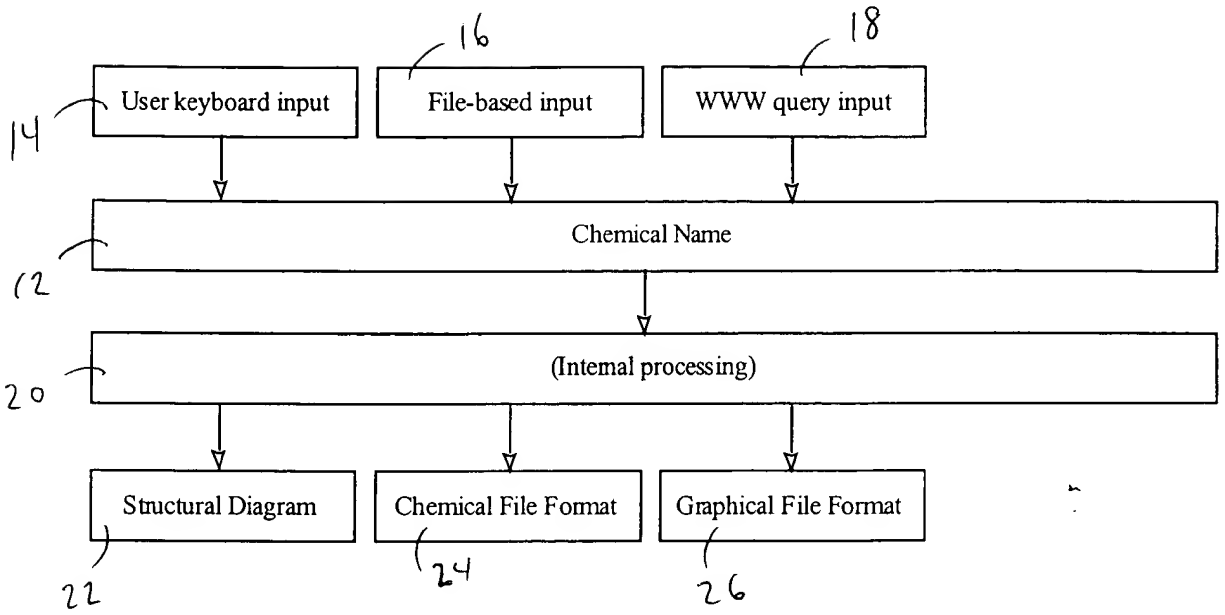

10
16
18
User keyboard input
File-based input
WWW query input
14
Chemical Name
12
(Internal processing)
20
Structural Diagram
Chemical File Format
Graphical File Format
22
24
26

FIG. 2

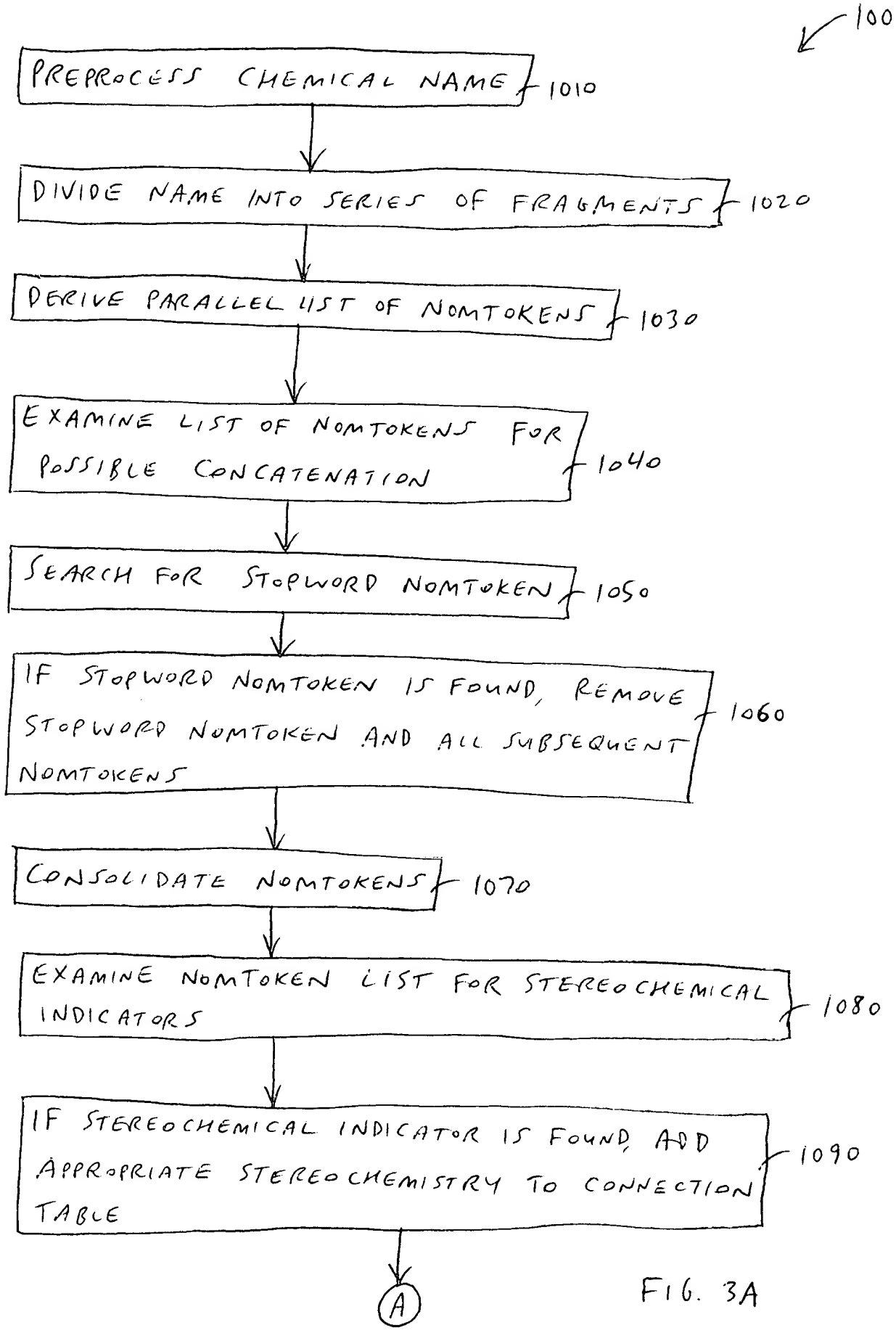

100
PREPROCESS CHEMICAL NAME
1010
DIVIDE NAME INTO SERIES OF FRAGMENTS
1020
DERIVE PARALLEL LIST OF NOMTOKENS
1030
EXAMINE LIST OF NOMTOKENS FOR POSSIBLE CONCATENATION
1040
SEARCH FOR STOPWORD NOMTOKEN
1050
IF STOPWORD NOMTOKEN IS FOUND, REMOVE STOPWORD NOMTOKEN AND ALL SUBSEQUENT NOMTOKENS
1060
CONSOLIDATE NOMTOKENS
1070
EXAMINE NOMTOKEN LIST FOR STEREOCHEMICAL INDICATORS
1080
IF STEREOCHEMICAL INDICATOR IS FOUND, ADD APPROPRIATE STEREOCHEMISTRY TO CONNECTION TABLE
1090
A

FIG. 3A

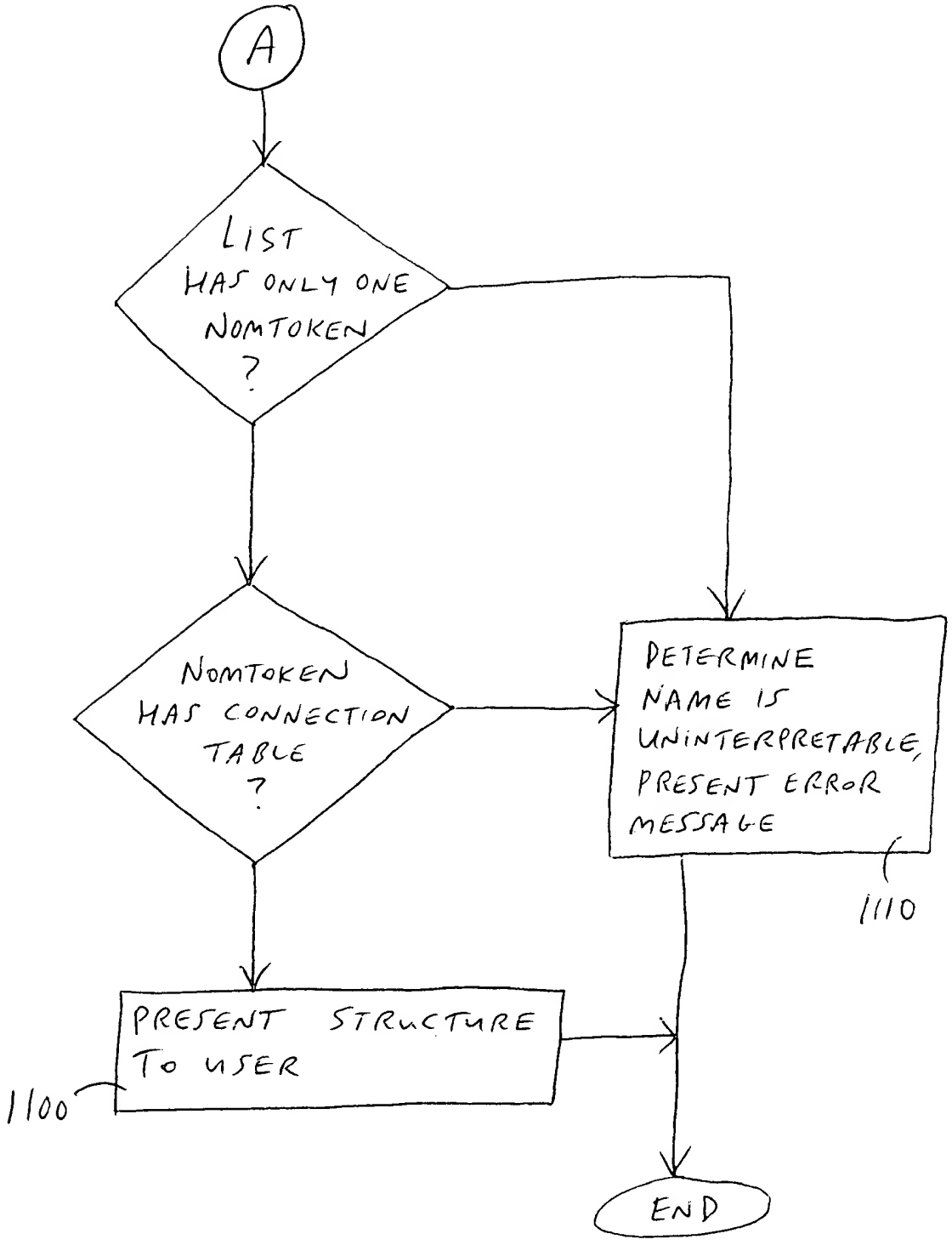

A
LIST HAS ONLY ONE NOMTOKEN ?
NOMTOKEN HAS CONNECTION TABLE ?
DETERMINE NAME IS UNINTERPRETABLE, PRESENT ERROR MESSAGE
1110
PRESENT STRUCTURE TO USER
1100
END

FIG. 3B

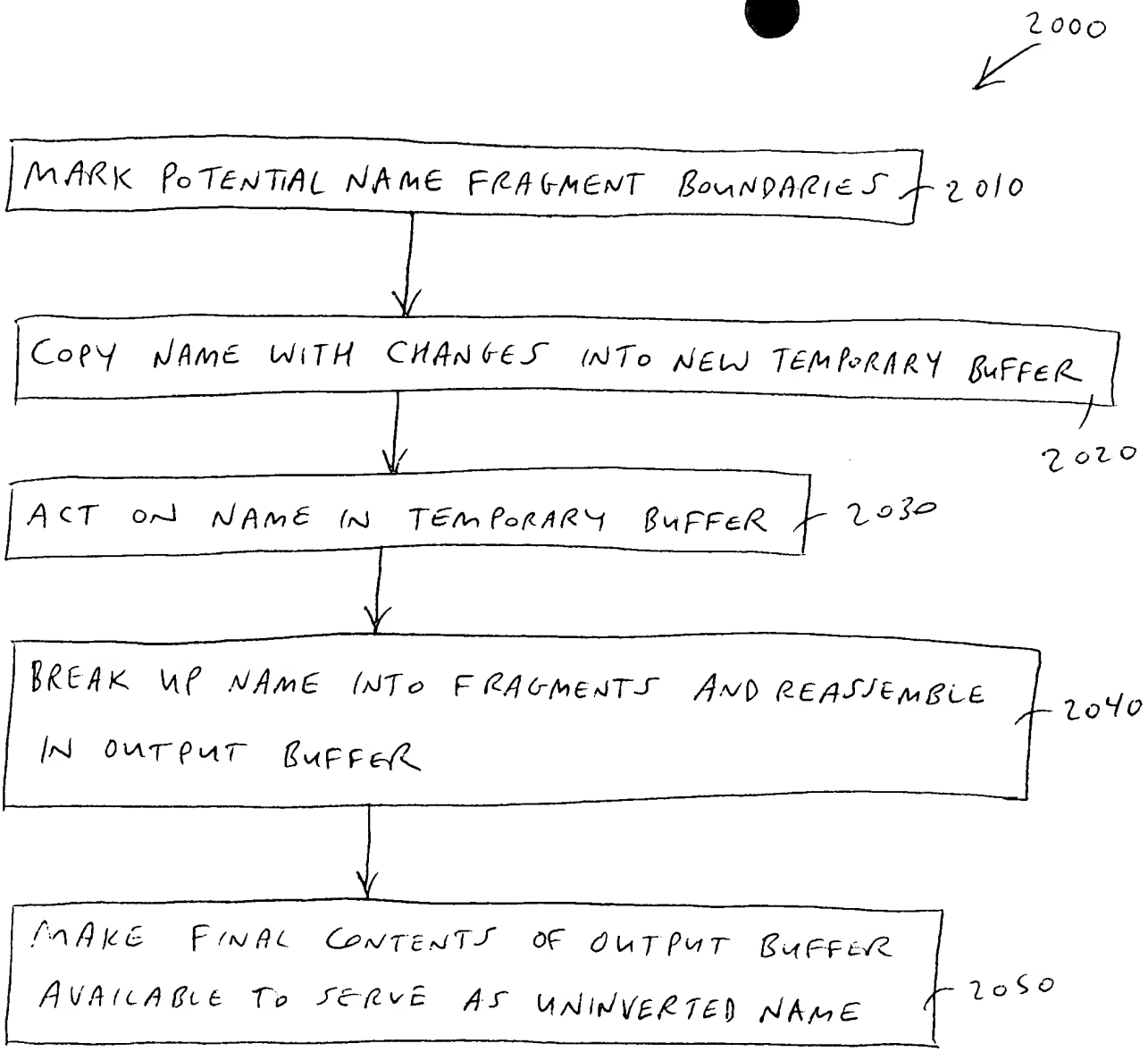

2000
MARK POTENTIAL NAME FRAGMENT BOUNDARIES
2010
COPY NAME WITH CHANGES INTO NEW TEMPORARY BUFFER
2020
ACT ON NAME IN TEMPORARY BUFFER
2030
BREAK UP NAME INTO FRAGMENTS AND REASSEMBLE IN OUTPUT BUFFER
2040
MAKE FINAL CONTENTS OF OUTPUT BUFFER AVAILABLE TO SERVE AS UNINVERTED NAME
2050

FIG. 4

Table 1: Strings that cannot terminate fragments to be prepended

"dry"
"ed"
"ide"
"ing"
"mm"
"one"
"rod"

FIG. 5A

Table 2: Strings that cannot initiate fragments to be prepended (note that some strings include a space character)

"in "
"ion"
"low "

FIG. 5B

Table 3: Strings that cannot appear anywhere in fragments to be prepended (note that some strings include one or more space characters)

"and"	"grade"	"radical"
" in "	"granul"	"random"
" ion"	"grease"	"reagent"
"%"	"grit"	"reduc"
"/"	"hbr"	"regular"
"7ci"	"hcl"	"remainder"
"8ci"	"heavy"	"ribbon"
"9ci"	"hydrin"	"rods"
"10ci"	"hydrous"	"salt"
"aas"	"ide "	"scale"
"absolute"	"imine"	"shot"
"acid"	"ing"	"slug"
"acs"	"inhibit"	"soluble"
"aerosol"	"isotop"	"solution"
"amidine"	"ite"	"sphere"
"analy"	"ize"	"spong"
"approx"	"lactam"	"stab"
"assay"	"lacton"	"stabil"
"ate"	"light"	"standard"
"balance"	"lump"	"stick"
"basic"	"mainly"	"sublim"
"basis"	"medium"	"sultam"
"bead"	"mesh"	"sulton"
"briquette"	"micron"	"synthetic"
"catal"	"ml"	"syrup"
"certif"	"mm "	"tablet"
"chip"	"moist"	"tech"
"chunk"	"morphous"	"tion"
"cm"	"mossy"	"titrant"
"coarse"	"natural"	"tone"
"contain"	"needle"	"typic"
"crucible"	"neutral"	"usp"
"cryst"	"nitrile"	"wire"
"deriv"	"pearl"	"with"
"dispers"	"pellet"	"xime"
"dry "	"piece"	"zone"
"dust"	"plate"	
"ed "	"poly"	
"electro"	"porous"	
"ester"	"powder"	
"ether"	"ppm"	
"fcc"	"pract"	
"fine"	"predomina"	
"flake"	"predominantly"	
"foil"	"protected"	
"for "	"puratronic"	
"from"	"pure"	
"glacial"	"purity"	
	"purum"	

FIG. 5C

Table 4.

ether

sulfide

disulfide

trisulfide

tetrasulfide

pentasulfide

hexasulfide

selenide

diselenide

triselenide

telluride

sulfone

disulfone

trisulfone

sulfoxide

disulfoxide

trisulfoxide

peroxide

ketone

diketone

triketone

tetraketone

FIG. 5D

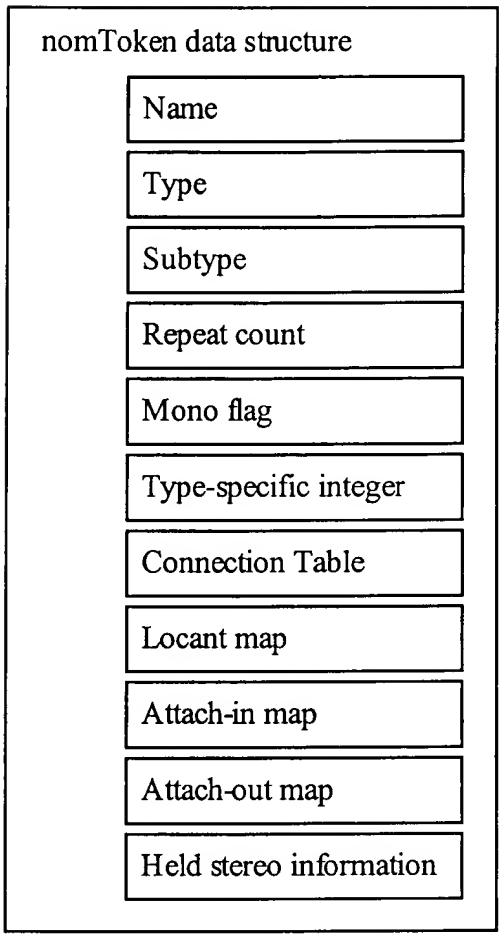

nomToken data structure
Name
Type
Subtype
Repeat count
Mono flag
Type-specific integer
Connection Table
Locant map
Attach-in map
Attach-out map
Held stereo information

FIG. 6

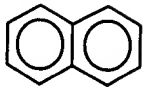
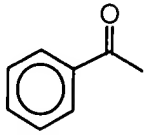
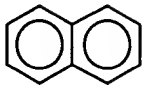
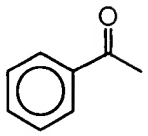
CONNECTION TABLE						
NAME	p	naphth	oxy	phenac	yl	bromide
TYPE	unknown	opfuser	infix	root	enderaminoacid	counterion
SUBTYPE	unknown	unknown	doublebondable	root	yl	ionable
PREV CHAR	'('	'a'	'a'	'a'	'a'	' '

FIG. 7A

CONNECTION TABLE



NAME	p	naphth	oxy	phenac	yl	bromide
TYPE	unknown	opfuser	infix	root	**suffix**	counterion
SUBTYPE	unknown	unknown	doublebondable	root	yl	ionable
PREV CHAR	'('	'a'	'a'	'a'	'a'	' '

FIG. 7B

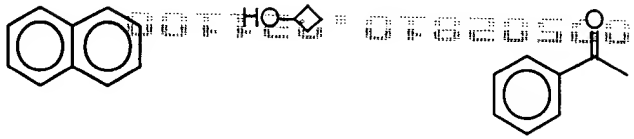
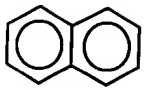
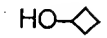
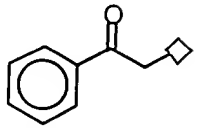
CONNECTION TABLE						
NAME	p	naphth	oxy	phenac	yl	bromide
TYPE	unknown	**root**	infix	root	suffix	counterion
SUBTYPE	unknown	unknown	doublebondable	root	yl	ionable
PREV CHAR	'('	'a'	'a'	'a'	'a'	' '

FIG. 7C

CONNECTION TABLE



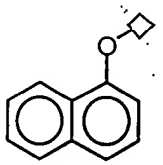


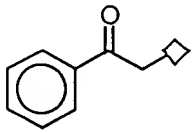


NAME	p	naphth	oxy	**phenacyl**	bromide
TYPE	unknown	root	infix	root	counterion
SUBTYPE	unknown	unknown	doublebondable	root	ionable
PREV CHAR	'('	'a'	'a'	'a'	' '

FIG. 7D

CONNECTION TABLE

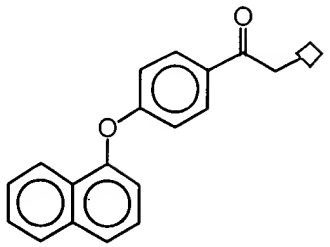




NAME	p	naphthoxy	phenacyl	bromide
TYPE	unknown	root	root	counterion
SUBTYPE	unknown	**infix**	root	ionable
PREV CHAR	'('	'a'	'a'	' '

FIG. 7E

CONNECTION TABLE

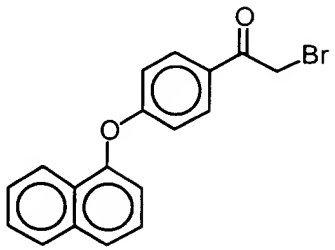


NAME	**p-naphthoxy-phenacyl**
TYPE	root
SUBTYPE	root
PREV CHAR	'a'

bromide
counterion
ionable
' '

FIG. 7F

CONNECTION TABLE



NAME	**p-naphthoxy-phenacyl bromide**
TYPE	root
SUBTYPE	root
PREV CHAR	'a'

FIG. 7G